

ANALYSIS

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Multifamily and Commercial Real Estate Performance Metrics

The COVID-19 Pandemic Begins: Update for the First Quarter of 2020¹

The world has changed significantly since REIS delivered its last quarterly update for multifamily and commercial real estate performance metrics in mid-February. How has our outlook for various property types changed? What are the prospects for economic recovery, given the COVID-19 pandemic? And how should we think properly about data – often sparse, about transactions, leasing activity, and commercial real estate fundamentals – as it is received? This paper will provide an update for the first quarter of 2020, but also focus on how different property types and geographic markets will evolve as a result of the current economic distress. The paper will also discuss capital market trends, financing issues, and speculate on what will happen in the near-term and long run.

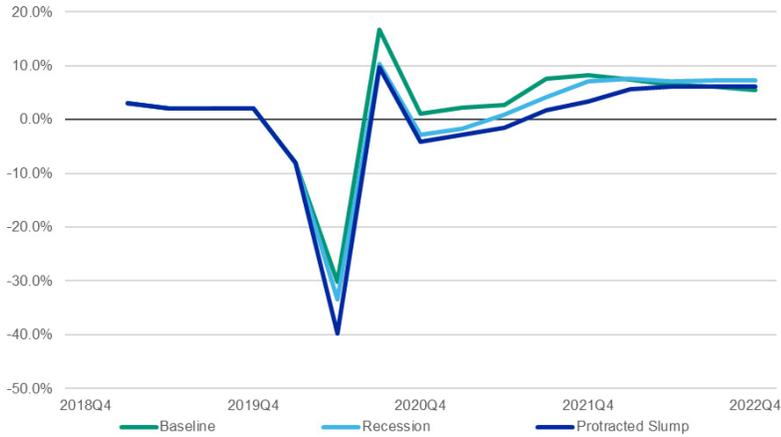
The Economic Backdrop

The COVID-19 pandemic really escalated significantly in the United States in mid-March, as the government and major employers took steps to implement quarantine policies. As such, several of the performance metrics we will discuss in this paper will not show much distress.

However, the second quarter will be different. Moody's Analytics expects US GDP to contract at an annualized rate of 30% - triple the prior record of 10% in the first quarter of 1958 – because of the unprecedented policy choice to have people shelter in place, which shut down the economy. In Figure 1 below, our baseline forecasts are shown as the green line. We also present our two *downside* scenarios here as well – a so-called moderate recession, and a protracted slump – which considers situations where reopening isn't as smooth, because of reinfection.

¹ This paper serves as a supplement to the REIS Quarterly Briefing conference call on multifamily and commercial real estate trends, delivered on Thursday, May 14, 2020. Replay available upon request.

Figure 1 Economic Scenarios for the Near-Term Real GDP, Annualized Quarter over Quarter Change

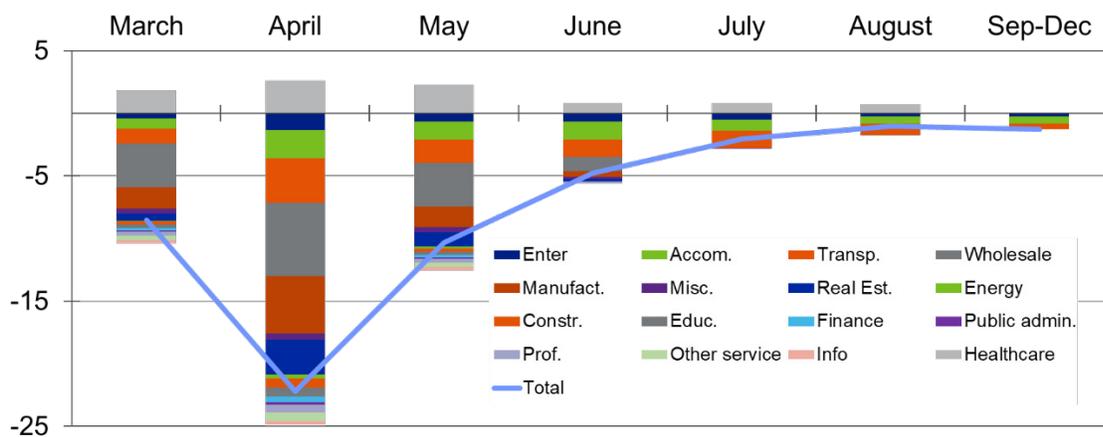


Source: Moody's Analytics

Baseline, we expect US GDP to contract by 6.6% in all of 2020. For perspective – that is about 1.5 times as bad as 2008-2009, and it will happen mostly in the middle of this year: a car crash, compared to the *relatively* slow motion six-quarter decline during the Great Recession (a term, by the way, which may need to be retired since it's not looking so 'great' anymore compared to our current circumstances).

Where is the stress concentrated in terms of industry sectors? There will be few industries spared, given shutdown policies. But Figure 2, which breaks down how specific NAICS sectors contracted relative to typical GDP contributions, and which forecasts how the rest of 2020 will look, gives us a sense of proportion. Entertainment (abbreviated 'Enter') and accommodations (abbreviated 'Accom') are hit hard, but because we are constraining relatively *larger* sectors like manufacturing and construction too, that's bringing down GDP growth *more severely*.

Figure 2 Deviation from Average GDP Contribution Annual Comparisons by Industry (March to December 2020)



Source: Moody's Analytics

With that said, COVID-19 itself is manifesting in very specific locations, mostly concentrated around dense urban areas and places with a higher prevalence of tourism and trade. The coastal areas are hit particularly hard, but in states like Oregon, Tennessee, and many others the actual observed cases are not that high, and hospital systems do not seem to be overburdened.

New York, however, is the global epicenter of COVID-19. As of May 13, the state has recorded over 330,000 cases. That outstrips the nearest *country* (Russia) by close to 100,000. And yet within the state of New York, concentration risk is an issue. New York City's five boroughs have about 190,000 cases, more than half of the state's totals. In New York City the hospital system continues to creak from the pressure of the COVID-19 pandemic.

On the employment front, the jobs that the US labor market lost in March and April are nothing short of staggering. The country lost 21.4 million jobs over the month of March and April, according to data released last Friday, May 8. In presentations we have delivered for the last nine years, we warned clients and the industry as a whole about precisely this situation: that when we experience two consecutive months of negative job growth, there is anywhere from an 85 to 90% chance that we have entered a recession. There actually has not been an official pronouncement of whether or not the US is in a recession – that tends to come with a six to twelve month lag – but it is quite likely that we are already in the midst of the most severe downturn since the Great Depression of the 1930s.

Credit is due to policymakers for the unprecedented speed and amount of support that has been – and is continuing to be – laid out for the economy. As bad as our economic projections are, it would be much worse without the kind of swift and extensive fiscal and monetary support that has been put to action. With that said, the effects of fiscal and monetary policy are likely to be insufficient. What the world needs is a credible, reliable, widely available – three necessary conditions – treatment and vaccination protocol so that we can return to some semblance of what we remember as normal. Otherwise, reopening processes are likely to be subject to reinfection and a two steps forward, one step back approach.

Property Market Updates

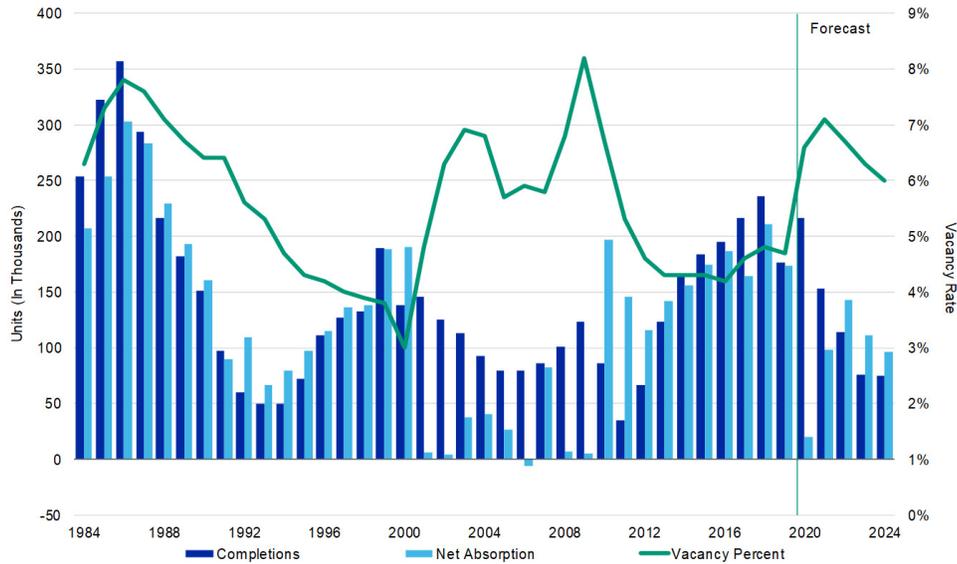
The Apartment Sector. With this somber economic outlook as perspective, let us examine the apartment market and how it fared in the first quarter. In this discussion we will toggle between the data that has come in, and what we expect to happen for the rest of the year. First, since the pandemic really escalated significantly in March, with economic closures following suit, we have not really seen that much distress in first quarter data.

Asking and effective rents rose at a relatively healthy clip of 0.3 and 0.4%, respectively. Vacancies remained anchored at a pretty tight 4.7%, with zero change relative to the end of 2019. With that said, think about how no-eviction policies and rules limiting rent growth have been put in place by various municipalities ordering people to shelter in place. We shouldn't expect *much* movement in occupancies as a result, probably even through the second quarter. We do expect to see movement in rents, however, given the kind of rent relief requests and rent collection losses we've been hearing about, and tracking.

What we can share given our data collection efforts is that through the month of April, rent collection losses have ranged from 4.8 to around 15%. This is based on our own research across properties, as well as at least 20 conversations with clients running multifamily properties around the nation. Again, April is just the beginning –we will see whether rent collection losses will spike if the unemployment rate continues to stay high. With that said, 5 to 15% is lower than what our clients expected (several clients were budgeting something in the order of 30%).

The apartment sector won't escape unscathed, however, given the projected severity of this downturn. We expect vacancies to peak at 7.0% next year, and asking and effective rents to fall by around 4 to 5% over this year and next. That is worse than 2008 and 2009, but still not *too* bad. In fact, let's not forget that given construction delays and cancellations, our expected 7.0% vacancy peak is over 100 basis points *lower* than the historic high of 8.1% which we recorded in 2009. So, the multifamily sector will take some hits, but will fare relatively well – compared to other property types.

Figure 3 National Apartment Market Completions, Net Absorption, and Vacancy



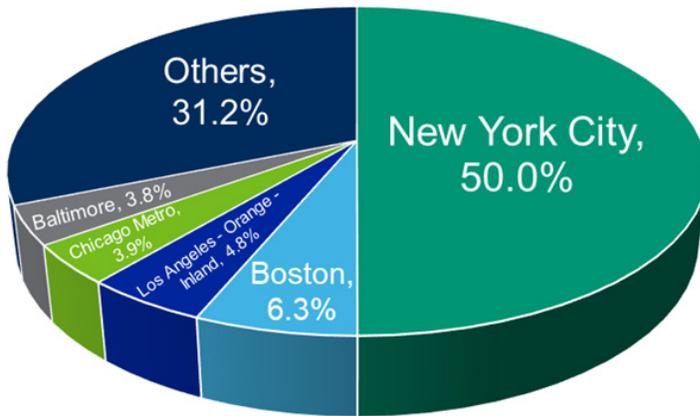
Source: Moody's Analytics REIS

The Office Sector. First quarter 2020 trends for the office sector mirrored what we saw for apartments: A 10 basis point *slight* increase in vacancies to 16.9%, and asking and effective rents both rising by 0.4%. Optimists for the office sector point out that it's the *long-term nature* of leases that's precisely what is sheltering the sector from immediate declines in revenue drivers. That's correct, *but* the real risk for the office sector is in the medium- to long-run.

REIS expects office vacancies to top 20% by next year – an historic high, exceeding the 19.7% record in the early 1990s during the savings and loan crisis – because of the medium- to long-term risks of a permanent reduction in demand for office space, particularly in dense urban areas. Large employers like Morgan Stanley have already overtly declared their intent to reevaluate their office footprint, given the success of remote working policies. We go into great detail of how to evaluate the intermediate risk to the office sector across geographic markets in a paper that we published on May 4. It includes data from our partner CompStak that shows, for example, in Figure 4 below, that New York, Boston, LA, Chicago, and Baltimore are at risk if Morgan Stanley scales back on their leasing commitments.² So, this sector is ripe for disruption in a way that it has never seen before this pandemic, forcing employers to embrace remote working options for their employees.

² "COVID-19 Will Force the Office Sector to Evolve (Further)" by Victor Calanog and Vivek Thadani. Published on May 4, 2020; available upon request.

Figure 4 Share of Space Occupied by Morgan Stanley Leases



Source: CompStak

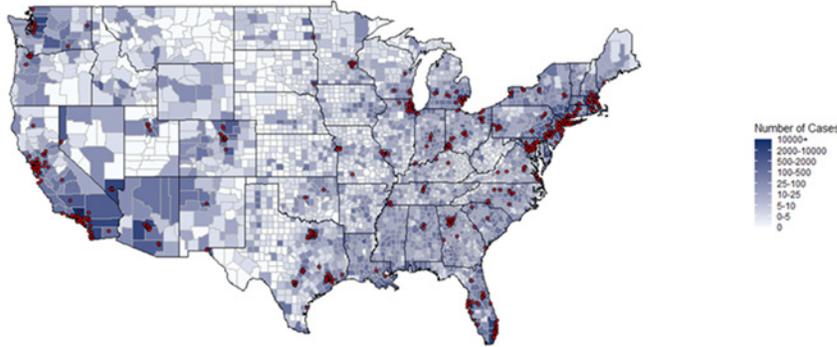
The Retail Sector. The majority of retail property types are truly in the crosshairs. Again, there is not much distress in first quarter numbers, with vacancies still flat and rents still growing slightly. Mall vacancies at 9.7% are at historic highs, but we had breached that level as of end-2019 given the continuing challenges of the sector and its retailers. This also means that retail entered this downturn in a position of relative weakness.

As a result of the shift to even *more* purchases online, given quarantine conditions, along with store closures that are bankrupting retailer after retailer, we expect vacancies to break historic highs. Rents are expected to decline by more than double the rate of stress from '08-'09. However, we do need to be really nuanced once we get below national averages. We need to make careful distinctions about the *type* of retail we are analyzing, and often we will need to go case by case. First, the big box retailers in the news – distress from Neiman Marcus, JC Penney, and Nordstrom – tend to have retail presence concentrated in *malls*. If your main tenant is a grocery or pharmacy in a relatively smaller neighborhood and community shopping center, then your main tenant is likely still open for business, and need not file for rent relief.

For the case of Macy's – as shown in Figure 5 below – the retailer has a retail presence in over 200 counties, but the top 20 counties account for about one-third of all the space they occupy. The largest concentration risk? Los Angeles county, where they have a presence in over 20 retail properties. Alas, LA county also has about 50 percent of COVID-19 cases in the state of California, so reopening retail stores out there is not likely to go as smoothly.³

³ We go into detail about concentration risk analysis in this paper: "COVID-19 and Retail: A Macy's Case Study" by Victor Calanog and Keegan Kelly (April 21, 2020). Available upon request.

Figure 5 Macy's Presence in US Counties
Relative COVID-19 Incidence Heat Map

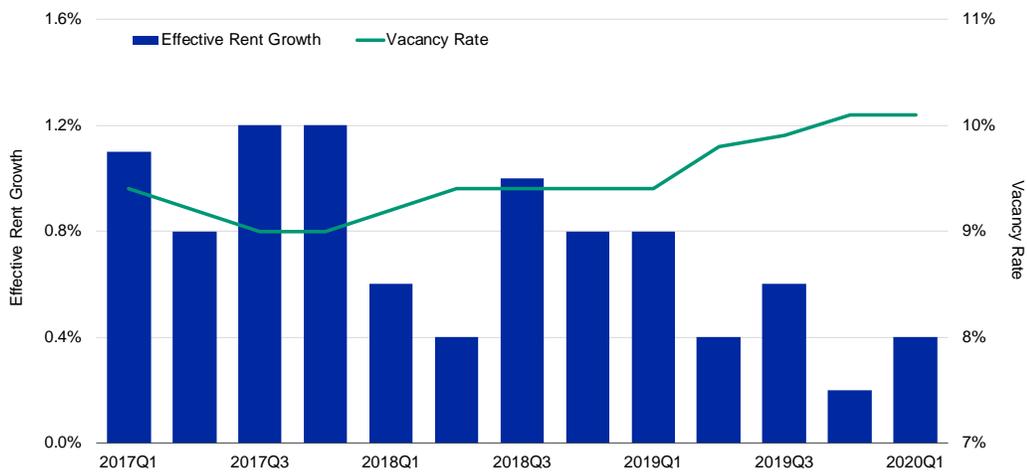


Source: Moody's Analytics REIS; US CDC

The Industrial Sector. In contrast to the office and retail sectors, REIS expects industrial properties to be hit relatively less hard. Flex/R&D vacancies stayed flat at 9.6% in the first quarter and asking and effective rents both rose by 0.4%. Again, not much distress. Warehouse/distribution vacancies, on the other hand, were up above 10.1%, trending higher relative to last year.

REIS does not expect as much distress for industrial, relative to, say retail, for example – given that what serves as headwinds for retail (online commerce) will serve as tailwinds for industrial (particularly for warehouse/distribution properties). Still, expect vacancies to rise and rents to fall given the severity of the economic slowdown.

Figure 6 Warehouse/Distribution Fundamentals
Effective Rent Growth and Vacancy

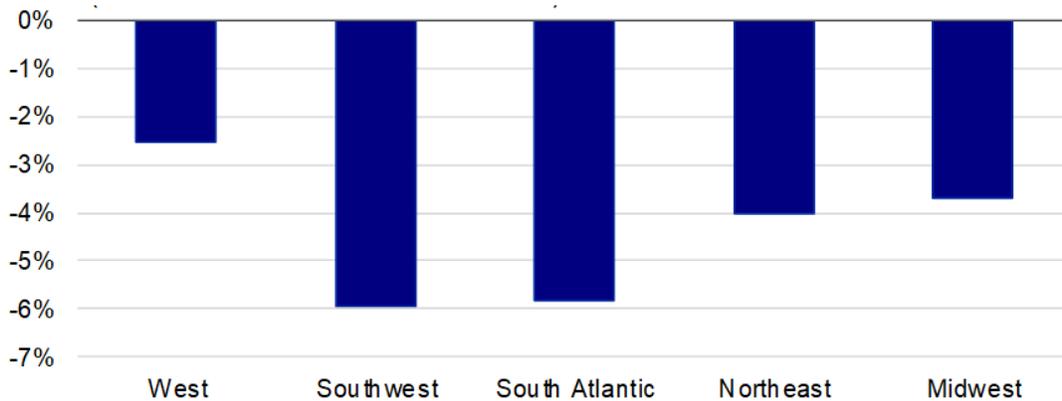


Source: Moody's Analytics REIS

The next few sections will provide an overview of specialty property types, before shifting the discussion to capital market trends.

Self Storage. Occupancies slid another 40 basis points for the SelfStorage sector as a whole in the first quarter, reaching its lowest levels since 2012. Rents for 10 by 10 non-climate controlled units fell by 3.9% year-over-year – a record decline. The Southwest and South Atlantic regions, as we see in Figure 7 below, shows the largest year-over-year declines, above 5%. However, this sector has been experiencing distress given oversupply even before the COVID-19 pandemic took root.

Figure 7 Regional Year-Over-Year Rent Change
10x10 Non-Climate Controlled Self-Storage Units



Source: Moody's Analytics REIS

What is interesting about Self-Storage is that we're seeing scattered reports of *increased usage* as, for example, students move out of their schools early and/or (amusingly) households stock up on essential goods for which they discovered they have no space. It is unclear as to whether these so-called positive reports will truly boost Self-Storage fundamentals in a measurable way, but we are not seeing much systematic evidence of it in our first quarter numbers.

Student Housing. Note how our outlook has changed for Student Housing properties, given that we frame the numbers in terms of Fall-over-Fall expectations. This is a result of two drivers: the economic downturn, and uncertainty around whether (and which) schools will reopen in the Fall. We now expect a 220 basis point increase in vacancies for properties that rent by the Bed, and a 100 basis point increase in vacancies for properties that rent by the Unit, building in the kind of supply growth we are monitoring for both subtypes. Rents are expected to fall between 4 to 6%.

Figure 8 Student Housing Fall 2020 Outlook

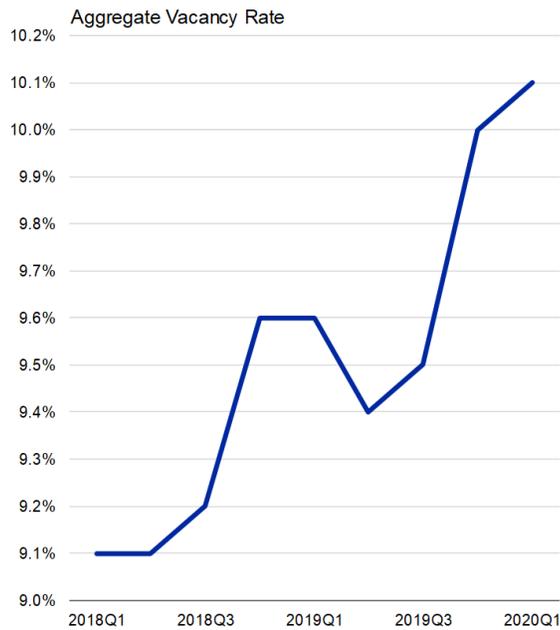
National Student Housing Market, Fall 2019 – Fall 2020				
	Vacancy Rate	Vacancy Chg, BPS	Rent Growth	Inventory Growth
Bed	7.4%	220	-6.1%	3.3%
Unit	3.3%	100	-4.6%	1.1%

Source: Moody's Analytics REIS

Speaking of *supply growth* – think about construction loans for Student Housing over the next two months. Typically, for the economics to work, developers will want to bring those units in by July or August at the latest, leasing up quickly as the Fall semester begins. But with the return to school in limbo, expect serious conversations between lenders and borrowers for Student Housing new construction to transpire over the next couple of months.

Senior Housing. Let's turn the conversation to the property type that is *most* at risk for serious near-term as well as long-term disruption because of the COVID-19 pandemic. Senior Housing vacancies, as you can see in Figure 9 below, have risen to a record high of 10.1% as of the first quarter of 2020. It has been on a slide upwards for some time, given supply-side issues in the sector. Rents increased in the first quarter across subtypes, ranging from 1 to 1.1% due to standard seasonality. Therefore, in the near term we already observe weakness in occupancies and a slight increase in rents.

Figure 9 Senior Housing Vacancy Trends



Source: Moody's Analytics REIS

The real issue is what will happen in the long run to this property type. The COVID-19 crisis is exposing cracks in the care system, showing that many nursing homes simply aren't equipped to deal with a pandemic (to be fair, many hospitals aren't equipped either). Still, with an estimated *one-fifth* of all deaths from COVID-19 in the US happening in nursing homes, we have to ask whether households will hesitate or permanently sour from bringing their elderly relatives to these places in the future. Move-ins will likely be zero for some time. Move-outs are accelerating, given deaths and the fact that even *without* COVID-19 the average tenant only stays in a senior home for about two years before moving on. So, the near and long-term viability of the business model for Senior Housing is up in the air. And its future really hinges on operators finding a way to credibly convince households that these are safe, reliable places in which their elderly loved ones can live out their last years – even given the possibility of another pandemic in the future.

Affordable Housing. What about trends for Low-Income Housing Tax Credits (LIHTC) units and affordable housing in general? No movement on the vacancy side in the first quarter, still at a very tight 2.4% which is *half* of that of market rate rentals. Asking rents grew by 0.6% in the first quarter of 2020, 20 basis points stronger than market rate rentals. In markets like Pittsburgh, Buffalo, Denver, and Knoxville, LIHTC rent growth *far* outstripped market rate comparables.

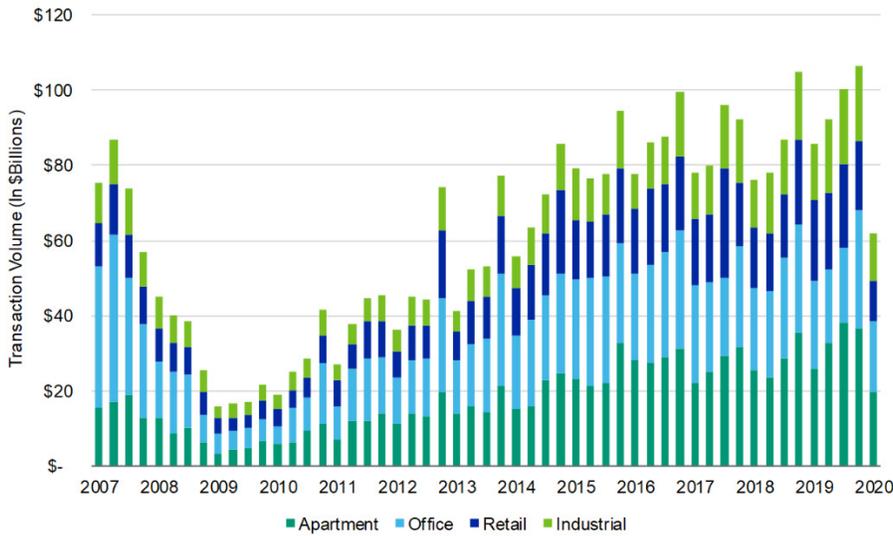
We also expect demand for affordable housing to *increase* or at least *stay stable* despite the COVID-19 crisis. Yes, people will lose their jobs. Yes, households are likely to double up. But any reduction in demand will likely affect higher priced rental units, and demand for affordable housing is likely to keep occupancies stable throughout this crisis. So if there's one rental housing sector that's likely to escape this crisis relatively unscathed, it will likely be this one.

Capital Markets for Multifamily and Commercial Real Estate

The economic shutdown didn't simply *disrupt* transaction markets: some markets simply disappeared altogether, and the search for the 'right' asset price in this environment on which to base transaction analysis has become a major challenge.

Take a look at transaction activity in the first quarter, despite the fact that the pandemic really only resulted in major lockdowns in mid- to late-March. We break down transaction activity by dollar volume in Figure 10 below by property type, and present portfolio sales as a different category. Trends in total numbers are indicative: transaction activity by dollar volume fell by 47% in the first quarter.

Figure 10 Transaction Activity (Dollar Volume)



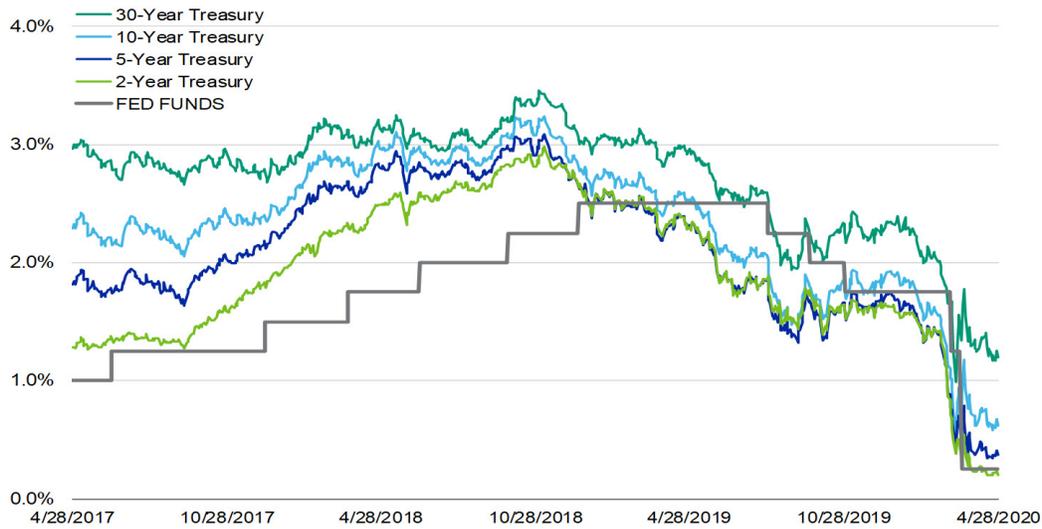
Source: Moody's Analytics REIS

These numbers are subject to transactions being backfilled and/or confirmed and so might change, but it is quite likely that second quarter figures will look even more dire, given the economic shutdown that commenced in March. There were – and still are – deals being closed, but if appraisers can't even make it to sites and it is difficult to coordinate all the sign-offs required to make deals happen; if interest rates have nosedived to levels unexpected a mere 30, 60, 90 days ago, you can imagine how many deals are being renegotiated right now or are in the process of being cancelled, as both buyers and sellers reevaluate and take stock of their respective balance sheets and priorities for the year.

What is going on in the debt markets? We had over \$600 billion of issuance across lender categories in 2019: that was a record high, given historical data from the Mortgage Bankers Association. As recently as three months ago, during the CREF meetings in San Diego, the industry was still forecasting a 9% increase in issuance *on top of* this historic high. That will likely not happen anymore given this pandemic. A lot of deals have been put on hold; some are being renegotiated given updated expectations of where interest rates and values will go – but that's the big question, isn't it? *Where will* interest rates go? *Where will* values go?

Interest rate trends. In Figure 11 below, we map out April 2017 to April 2020 trends for interest rates of various maturities, which in general have tended to move closely. The punchline for this chart? Sub-1% rates for the 5- and 10-year Treasuries, which are the typical risk-free rates used to benchmark commercial real estate loans. Levels were never that high to begin with, averaging 2% over this time period, but imagine the situation today, compared to as recently as February.

Figure 11 Interest Rate Trends (April 2017 to April 2020)



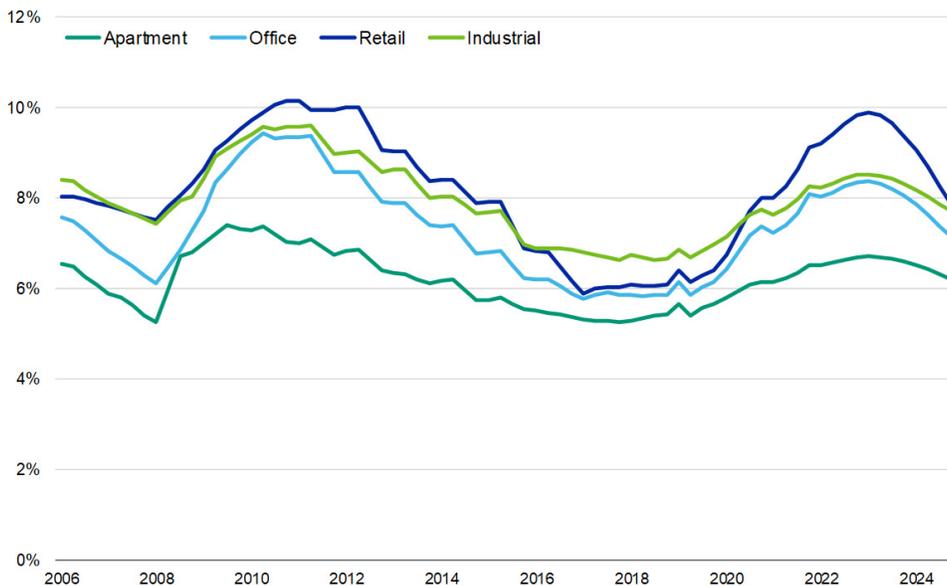
Source: US Treasury Department; US Federal Reserve

Moving forward, we expect interest rates to remain low as long as the economy continues in this contractionary mode. And until the recovery truly takes root, we aren't forecasting any significant increases in rates over the next year or two.

What does that mean for cap rates? Wouldn't interest rates and cap rates move alongside each other, *positively correlated*? Not in this situation. We fully expect cap rates to *rise*, just as they did in the last downturn in 2008-'2009, as the change in values incorporates the forecasted distress on the income side. But by how much? That will vary by sector.

In Figure 12 below we show our near-term forecasts for cap rates – no surprise, they are expected to increase.

Figure 12 Cap Rate Forecasts (Near Term)



Source: Moody's Analytics REIS

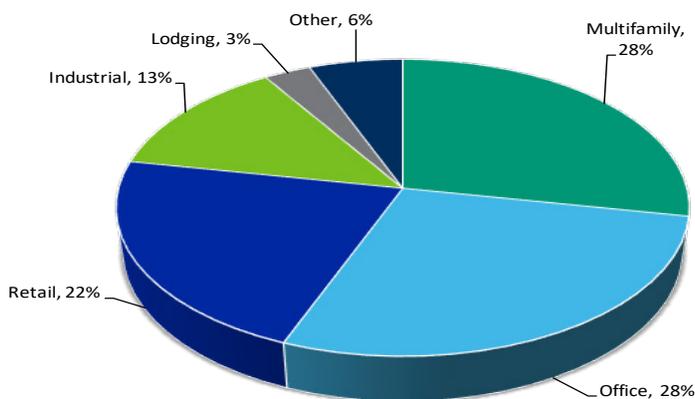
Our cap rate projections suggest that in 2020, multifamily values will decline *the least*, by 7.8%. Industrial will also suffer *relatively* less, with values declining by 10.2%. The declines become more severe once we examine office and retail – with office values falling by 16.8%. And, in the top spot for value declines? Retail, with projected declines of 20% for 2020.

There will, of course, be variation across markets. In multifamily – the *least* hit – we’re looking at a 1.2% decline in Tulsa but a 12.9% decline in San Jose. For retail – the *worst* hit – Northern New Jersey markets will suffer a relatively mild 6.7% decline, but Tucson will incur a value drop of up to 35% or so. While this is roughly consistent with our outlook for fundamentals like rents and vacancies, we all still need to go market by market, property type by property type, as we evaluate potential risk.

For perspective, we should also note that these are *forecasts*, and we have yet to see significant *systematic* declines in value given the trickle of transactions that have been coming in. We are constantly interfacing with clients, assessing the data, and estimating where cap rate trajectories will go given sparse transaction volume.

It bears repeating that stress will depend a lot on focus and footprint. We hinted at this earlier when we spoke about the geographic concentration risk of COVID-19 cases across the country. Therefore, the discussion needs to be highly specific when it comes to particular cases. Let’s take, for example, our point about commercial real estate debt markets. The latest data from the Federal Reserve shows that we have outstanding balances across lender categories of about \$4.59 trillion dollars. Of that, the Mortgage Bankers Association estimates that the *insurance sector* composes about 15% or so of that pie. Furthermore, data from the Mortgage Bankers Association also shows that in the insurance sector – see Figure 13 below – the bulk of loans supported by commercial property types are in *office* and *retail*. That presents relatively higher levels of risk, given what we’ve discussed so far, but on the positive side – only 3% of typical life co loans are supported by hotels.

Figure 13 Composition of CRE Debt Exposure (Insurance Industry)



Source: Mortgage Bankers Association

We need to carefully consider how this pie will look not just for specific insurance companies, but for other types of lender institutions, to assess relative risk.

Summary and Conclusions

This final section offers some parting thoughts given the trends we have covered in this paper. First, this is the most dangerous pandemic we've seen in our lifetimes – but it may not be the last. There is a lot of uncertainty around our policy response: was it too severe, was it not comprehensive enough? And the truth is that there is no precedent to this experience, because we have never come up against a health issue like this in our global, interconnected world. That adds to the uncertainty, and is reflected in market volatility.

Second: the economic effects of the virus, and our policy response, is likely to result in the worst recession since the Great Depression. Arguably even worse in the short time frame over which we're having it happen. The Great Depression played out over several years – this one will likely play out this year and next. This downturn will make '08-'09 look relatively tame.

The downturn will hit property types differently: multifamily (specifically affordable housing) is likely to suffer the least. Industrial warehouse/distribution properties are also likely to take some hits, but benefit from retail headwinds. Office and retail are ripe for disruption. Student Housing will take a hit in the near term, but the future viability of Senior Housing is quite uncertain.

Finally, *duration* matters. The longer the shutdown plays out; the bumpier the reopening process; the greater the amount of time before a vaccine is made widely available, the higher the chance that what we consider temporary adjustments become more and more the 'new normal,' and the greater the chance that behavior changes permanently. This affects how employers and households approach their use of office space; how and where they shop; where they feel comfortable living. This crisis is not just a local shock: it is a national and global shock, and because of this it is less likely to be consigned to collective memory as simply an aberration.

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